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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/827,340

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Hiroyuki Ishida

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03/24/2006

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EXAMINER

CARIASO, ALAN B

ART UNIT

PAPER NUMBER

2875

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/827,340

Applicant(s)

ISHIDA, HIROYUKI

Examiner

Alan Cariaso

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 6-17 is/are allowed.  
6) ☒ Claim(s) 1-5 is/are rejected.  
7) ☒ Claim(s) 18-20 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Receipt of applicant's response filed January 4, 2006 is acknowledged. Claims 1-20 are pending. Claims 1-7, 9, 11, 12, 14 and 17 are amended, claims 18-20 are newly submitted.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over DASSANAYAKE (US 5,550,716) in view of BARROS et al (US 6,926,432).
5. DASSANAYAKE discloses a headlamp that forms a light distribution pattern having a horizontal cutoff line (col.1, lines 36-40) comprising: a plurality of first light irradiation units (22, fig.2) and a plurality of second light irradiation units (represented by either 16 or 18, or the other set represented by 20, fig.2) that form at least part of the

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horizontal cutoff line or the entire light distribution pattern, each of the first and second light irradiation units (22,16,18) comprising: a substantially rectangular light emitter (24) facing forward extending in the horizontal direction (27), a projection lens (26) inherently projecting the light emitter inverted image, at least the second lighting units (18,22) include a second light source (24) that extends in an inclined direction at an angle (29) with respect to a horizontal direction (27) and therefore capable of producing an oblique cutoff line extended at an angle with respect to a horizontal direction (27). Though, DASSANAYAKE does suggest a proximal electric light source as the light emitter (col.2, lines 25-29), it not does disclose a semiconductor light emitting unit.

6. BARROS teaches at least one rectangular diode chip 34 (figs.29 and 32-G) with a lens optic (36) for the purpose of optimizing light emission (col.18, lines 55-56) producing one of plural shaped light distribution patterns (figs.30-31,32G) including a rectangular light projection or pattern (111, col.18, lines 47-65) projected from a vehicle. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the headlamp system of DASSANAYAKE to include the type of semiconductor light emitting unit as taught by BARROS et al in order to optimized light emission and produce a rectangular light distribution pattern, making clear contrast at the edges of the pattern by efficiently projecting useful light from an efficient light source.

***Response to Arguments***

7. Applicant disagrees with the rejection of independent claims 1 and 5, and submits that one of skill in the art at the time of the invention would not have been motivated to modify Dassanayake with Barros, that reasons must be shown that the skilled artisan confronted with the same problems as the inventor and with no knowledge of the claimed invention would select the elements from the cited prior art references for a combination in the manner claimed, and recites legal references to *In re Rouffet* and *In re Mills*. Applicant further states that Dassanayake is directed to a headlamp which utilizes fiber optic lines, and in contrast, Barros is disclosed as being directed to a side marker lamp that provides complementary lighting for a vehicle, that there is no teaching or suggestion that the chips 34 used in Barros would be appropriate for use in the headlight of Dassanayake nor that these chips 34 would be capable of producing the large light output, and submits that there is no motivation of one of skill to modify the references.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Dassanayake shows that a rectangular shaped light emitter (24) produces the desired cutoffs for

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headlight distribution, and the light emitter is not just limited to a fiber optic light source but also including an arc discharge lamp or incandescent lamp (col.2, lines 25-29) with the rectangular shape, which is substantial in meeting the claimed subject matter of claims 1 and 5. To modify the emitter to include a rectangular semi-conductor chip, with the teachings of Barros of optimizing light emission and produce shaped light distribution patterns, are considered adequate over a at the time the invention was made.

***Allowable Subject Matter***

9. Claims 6-17 are allowed.
10. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. The following is a statement of reasons for the indication of allowable subject matter: None of the prior of record suggests: a center of the at least one first emitting unit is shifted away from an optical axis of the at least one corresponding first projection lens; a center of the at least one second light emitting unit is shifted upward from an optical axis of the at least one second corresponding projection lens; first and second types of the first light emitting unit having corresponding first projection lenses having corresponding first and second focal lengths, wherein said first focal length is greater than said second focal length; wherein said first lighting system is positioned below said second lighting system in said headlamp; at least a third light emitting unit that is

substantially rectangular and faces forward and is shifted upward and rightward with respect to said optical axis; the first projection lens being plano-convex.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Cariaso whose telephone number is (571) 272-2366. The examiner can normally be reached on 9-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alan Cariaso  
Primary Examiner  
Art Unit 2875

March 20, 2006

AC